

Title (en)
Dry etching method for semiconductor device

Title (de)
Verfahren zum Trockenätzen für Halbleiteranordnung

Title (fr)
Procédé de gravure sèche de composant semiconducteur

Publication
EP 1148535 A2 20011024 (EN)

Application
EP 01108940 A 20010410

Priority
JP 2000117502 A 20000419

Abstract (en)
When etching is performed with respect to a silicon-containing material by using a dry etching apparatus having a dual power source, the application of bias power is initiated before oxidization proceeds at a surface of the silicon-containing material. Specifically, the application of the bias power is initiated before the application of source power is initiated. Alternatively, the source power and the bias power are applied such that the effective value of the source power reaches a second predetermined value after the effective value of the bias power reaches a first predetermined value.

IPC 1-7
H01L 21/00; **H01L 21/465**; **H01J 1/00**

IPC 8 full level
H01L 21/00 (2006.01); **H01L 21/3065** (2006.01)

CPC (source: EP US)
H01J 37/32 (2013.01 - EP US); **H01J 37/32706** (2013.01 - EP US); **H01L 21/02057** (2013.01 - EP US); **H01L 21/02071** (2013.01 - EP US); **H01L 21/02238** (2013.01 - EP US); **H01L 21/02252** (2013.01 - EP US); **H01L 21/02255** (2013.01 - EP US); **H01L 21/3065** (2013.01 - EP US); **H01L 21/31662** (2016.02 - US); **H01L 21/32137** (2013.01 - EP US); **H01L 21/67069** (2013.01 - EP US); **H01J 2237/334** (2013.01 - EP US); **H01L 21/76232** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1148535 A2 20011024; **EP 1148535 A3 20060607**; **EP 1148535 B1 20100616**; DE 60142377 D1 20100729; US 2001034138 A1 20011025; US 2004147126 A1 20040729; US 2006258117 A1 20061116; US 2007029284 A1 20070208; US 6762129 B2 20040713; US 7148151 B2 20061212; US 7341922 B2 20080311; US 7402527 B2 20080722

DOCDB simple family (application)
EP 01108940 A 20010410; DE 60142377 T 20010410; US 48796806 A 20060718; US 54552806 A 20061011; US 75918004 A 20040120; US 82609801 A 20010405